US Agency for International Development

Oil and Gas Valuation Model for Georgia and Implications for Government Revenue Collection

August 30, 2002

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LAG-I-00-98-00005-00 Task Order 14

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TABLE OF CONTENTS

1. GEORGIAN OIL AND GAS VALUE CHAIN MODEL

1.1 INTRODUCTION

Georgia is not blessed with huge hydrocarbon reserves like the other countries of the Caucasus and Caspian, namely Azerbaijan, Kazakhstan and Turkmenistan. Still, there is ample scope for the Georgian government to raise significant revenues from the petroleum sector. The Georgian government has taken the correct step of privatizing assets employed in the petroleum sector in an attempt to improve their profitability under private management and ownership. Still, some strategic assets, such as the North-South gas pipeline and Baku-Supsa oil pipeline, remain state-owned and are managed by government concerns including the Georgian International Gas Company (GGIC) and the Georgian International Oil company. Either through the use of joint ventures (JVs) or Production Sharing Agreements (PSAs), the state-owned oil company JSC Saknavtobi continues to monetize the state's share of oil and gas production. JSC Tbligazi, the largest gas distribution company in Georgia, is owned and managed by the state through the Municipality of Tbilisi. All of the liquified petroleum gas (LPG) terminals in the country are owned and managed by the state owned company Sakhthevedgazi.

From the above, one has the impression that the state still plays a key role in the petroleum sector. Four years ago, PA Consulting[1] developed an oil and gas value chain model to quantify the extent of public sector participation in the petroleum sector. The model estimated that the public sector participation was about 23% (implying that 77% was in private hands) using a value added concept to measure the extent of participation. Currently, based on the results of the updated model, public participation has fallen to 17%.

In the recent past, the extent of corruption and apparent leakage of revenues due the government from the petroleum sector have received increased attention. There seems to be a proliferation of so-called micro "tea-kettle" refineries in Georgia. None of these small operations would be profitable if they were forced to pay taxes. There are growing complaints from some downstream oil companies about the "non-level" market conditions present in Georgia, favoring those who engage in product smuggling and illegal refining. It is known that the government is losing significant revenues as a result of the extent of product smuggling and illegal operations in the petroleum sector; this report provides PA's analysis to quantify the amount of these losses.

1.2 BACKGROUND

Three years back, the state agency for regulation of oil and gas resources (SAROGR) was created by the Law on Oil and Gas. One of its objectives is to maximize the revenues from the oil and gas reserves for the state. The nascent agency is developing a management information system to monitor the gas and oil production activities for the exploration and production companies including the state oil company Saknavtobi. Production statistics are being collected for these companies; however, there has yet to be any systematic effort to

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[1] This work was completed by Hagler Bailly, the predecessor firm acquired by PA.

assess the profitability of these companies and to compare their forecasted (or potential) profitability with the actual results achieved.

Given the above background, PA developed an oil and gas value chain model for Georgia. This model makes use of the data available from SAROGR for the oil and gas exploration companies. The audited accounts of Saknavtobi and GIGC are also a good source of information. USAID/PA's earlier work with Tbilgazi provided detailed information on gas distribution activities. Further, PA analyzed the economics of operating micro "tea-kettle" refineries.

In terms of other related projects, the World Bank sponsored a project entitled "Petroleum Product Revenue Enhancement for the State Budget of Georgia" in September 2000. The data from that report and extensive discussion with Mr. Andro Kotzetishvili, the Head of the Excise Control Board, provided useful statistics for the development of the model.[2]

1.3   RESULTS OF THE MODEL

As shown below, most of the value in the Georgian petroleum sector is added through the marketing function:

Table 1: Estimated Value Added in Petroleum Sector (2002)

Sub-sector	Public Sector ($MM)	Private Sector ($MM)	Total ($MM)
Upstream	1.9	15.0	16.8
Refining	- 0.1	- 0.8	- 0.9
Marketing	24.0	241.9	265.8
Midstream	13.8	15.4	29.2
Gas Distribution	-9.7	-1.3	-11.0
Rail Transportation	24.0	0	24.0
Total	**53.8**	**270.2**	**324.0**

Source: PA estimate

The total value generated by the petroleum sector is estimated to be about $326 million per year. Of that amount, $266 million is generated by marketing activities. Based on the above statistics, about 17% of the value generated in the petroleum sector is controlled by the state sector. This figure would have been slightly higher had the losses in gas distribution been adequately addressed.

The above statistics, to a great extent, are of academic interest only. The model provides an assessment of the public versus private sector participation in a quantitative manner. It is true that the privatization of the petroleum sector has been accomplished to a great extent in

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[2] *Petroleum Product Revenue Enhancement for the State Budget of Georgia*, September 2000, prepared by Downstream Oil Advisors Ltd. of Vancouver, Canada.

Georgia. However, it may not be correct to conclude that Georgian consumers and/or the Georgian government have benefited. Those institutions that remain in the public sector are continuing to have significant impact on the quality of life (Tbilgazi is but one example). The model does not lend itself to answer the question about the benefits of privatization from the perspective of the Georgian consumer, but it does provide useful information on the revenue potential of the petroleum sector to the government as described below.

Table 2: Estimated Government Revenue Potential in 2002

Subsector	$MM
Upstream	8.46
Refining	10.7
Marketing:	
LPG	15.50
Gasoline	133.00
Diesel	53.00
Others	15.30
Sub-total	216.80
Midstream	10.90
Gas Distribution	1.15
Rail Transportation	4.20
Total Revenue Potential	**247.85**

Source: PA estimate

As shown above, the total potential government revenues from the petroleum sector are about $250 million per year. Just two products - gasoline and diesel - alone account for $186 million, or 75% of the total potential. KPMG was able to compute the actual revenues collected from the petroleum sector by examining bank deposits for 2001; they amounted to less than $50 million.

The exhibit below shows the difference between potential revenues to the government, as estimated by the model and the actual revenues the government receives.

Exhibit 1: Oil and Gas Sector Potential vs. Actual Government Revenues
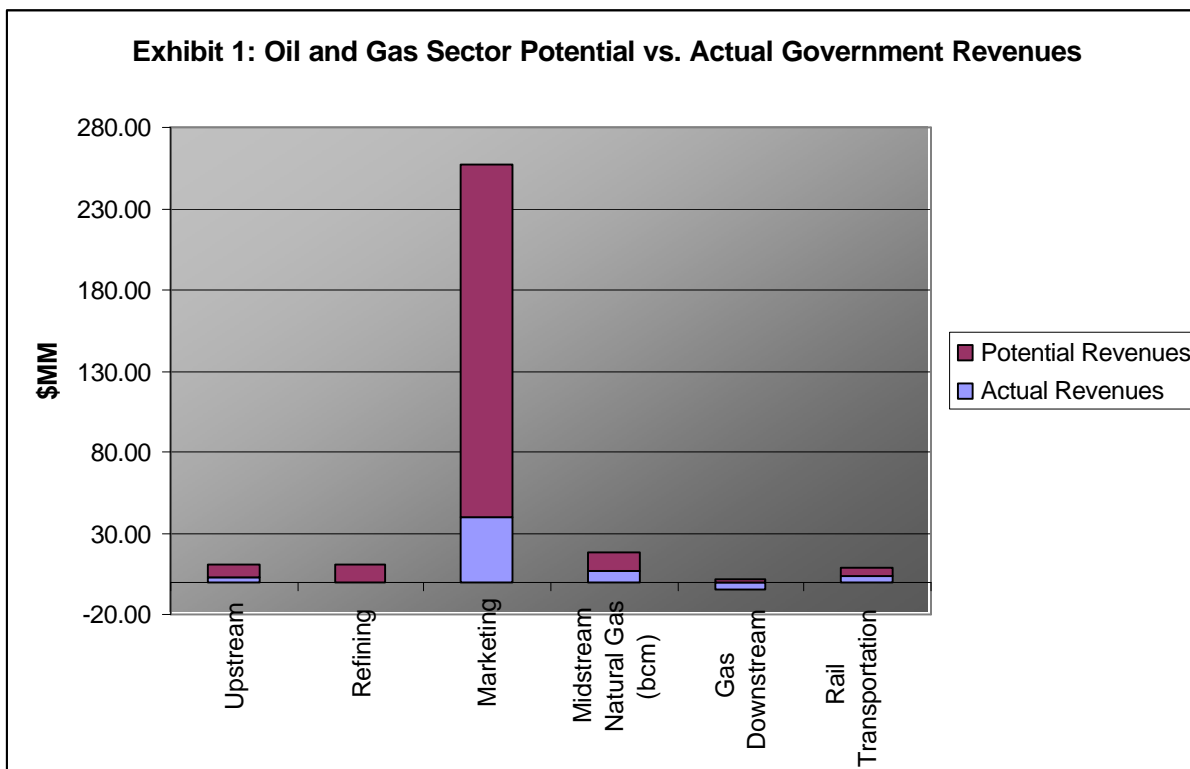
Every effort has been made to use accurate data in the development of the oil and gas value chain model. Still, it cannot be claimed that the estimates are error free. Nonetheless, they do provide a fairly accurate estimate of the large gap between the revenues actually collected by the government and those potentially available. If the Government of Georgia was successful in collecting all of the potential revenues from the petroleum sector, its tax collections could increase by a staggering 33%. Such a huge increase in government revenues can support many needed expenditures, such as improving health and educational facilities, allowing payment on a timely basis of pensions, expanding the social "safety net", contributing to civil service reform efforts through paying a reasonable salary to public sector employees and improving the overall governance of the nation.

It should be stressed that the consumers indeed pay value added tax, excise, and customs taxes when they purchase petroleum products. No products are sold that reflect the non-payment of taxes. Product prices in the market place are set by the legitimate petroleum supplier/marketer, who is pricing their product based on the full payment of taxes. The other sector participants that are avoiding taxes through smuggling and illegal operations sell their products for close to, if not the same, prices as the legitimate supplier. Thus, the consumer pays the tax burden, but the illegitimate supplier/market captures the taxes paid as a windfall.[3] In the case of products such as LPG (which attracts the most taxes on a percentage basis), the profit margins are at an extremely excessive level.

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[3] Of course, in order for a non-legitimate supplier/marketer to operate in this market, it is reasonable to presume that some portion of this windfall is shared with other parties in a collusive arrangement to sustain its operations.

The review of the oil and gas value chain model shows that there is a need for the government to pay as much attention to upstream activities of the petroleum sector as to the downstream. So far, to attract foreign investment in exploration and production activities, the government has been correctly paying greater attention to the upstream reform process. Now, based on these results, the government needs to bring about legal, regulatory and institutional reform to streamline downstream operations, create the same conditions for all market participants and collect the revenues offered by this sector.

2. ASSUMPTIONS BEHIND THE MODEL

2.1 MAJOR ASSUMPTIONS AND DATA SOURCES

The production statistics for oil and gas used in the model are based on the data submitted by the oil companies to SAROGR for 2001. Crude oil realizations are based on Mediterranean and Ural crude minus $4 per barrel. The operating cost to produce is estimated to be $4 per barrel. However, Georgia is not an efficient market, and the actual costs are far more than assumed. Actual crude oil price realizations are also less than what could be expected in an efficient market.

Refinery profitability is based on Mediterranean prices minus $20/MT. This may be true in the case of those petroleum products purchased from Azerbaijani refineries or from Turkmenistan. In the case of products purchased from Greece or Bulgaria or even Russia, product prices are Mediterranean prices plus $20/MT. However, the quality of the products from Greece, Bulgaria and other Black Sea ports tend to be much better than that of the products produced by the "tea-kettle" refineries. Thus, the product prices based on Mediterranean prices minus $20/MT may be realistic to estimate refinery profitability, as well as, marketing profitability. In the case of marketing products purchased from Greece or the Black Sea ports, the purchase prices will be higher, as well as, the prices to the consumers.

As shown in section 1, tax revenues from gasoline and diesel account for 75% of the total potential tax revenues from the petroleum sector. Therefore, to begin with, it is important to focus attention on these two products. Unfortunately, there are no reliable sources on the import of these products nor on their actual domestic consumption. The estimates given by the government do not appear to be accurate. As described below, there are many differing estimates.

Gasoline

The estimate used in the model for gasoline consumption is 650,000 tons per year. This figure is based on the number of vehicles, estimated miles driven and the gasoline mileage for the vehicle stock in Georgia. In terms of other data, the World Bank report of 2000 referenced earlier estimated consumption to be 600,000 tons per year. According to this same report, the USAID/KPMG Consulting, Barents Group LLC project estimated consumption to be 621,600 tons in 2000. Earlier World Bank studies estimated the demand for gasoline to be about 660,000 tons per year. Another estimate prepared by Avia Fuel Service was only 444,000 tons per year for 2000.

Actual estimates based on customs data were 428,000 tons in 1998, 304,800 tons in 1999 and 132,000 tons in 2000. It is obvious that these data are unreliable. In fact, this drop off in customs data indicates that the problem of smuggling and/or illegal refining activities is worsening significantly.

Diesel

It is assumed that 400,000 tons of diesel fuel are used per year. The World Bank report of 2000 estimated consumption to be 432,000 tons per year in 2000, a figure identical to that attributed to USAID/KPMG Consulting, Barents Group LLC. Earlier estimates by the World

Bank were 340,800 tons per year. The actual estimates based on customs data are 303,600 tons in 1998, 76,800 tons in 1999 and 60,000 tons in 2000, again an indication of the poor quality of information available and of a worsening problem with smuggling and/or illegal refining activities.

As shown above, the estimates of gasoline and diesel consumption vary by a large margin. Even for an important product like LPG, there are no reliable consumption statistics. When gas supplies are cut off, consumers may switch to LPG for cooking and heating needs. In rural areas, LPG is the most dependable fuel after firewood. The model has assumed total LPG consumption to be about 75,000 tons, whereas the World Bank report estimates it to be just 18,000 tons per year in 2000. Before 1989, when gas was freely available, total LPG consumption in Georgia was 200,000 tons per year.

This brief analysis of key assumptions clearly demonstrates that there is dearth of reliable information on this important sector. With the establishment of SAROGR, at least there is now reasonably reliable data on oil and gas production. But even that agency has to take additional initiative to collect financial information on the operations of the oil companies. The Georgian National Energy Regulatory Commission (GNERC) is able to provide some useful data on gas import, transit and gas consumption, but not on the financial operations of the gas distribution companies. Thus, one benefit of this model is that it demonstrates the kind of statistics the government should collect to monitor tax collection in the petroleum sector.

3. CONCLUSION

The model conclusively demonstrates that the Government of Georgia can earn substantially more tax revenue from the petroleum sector. The total potential revenues from the petroleum sector are as much as $250 million per year, which is 42% of the current fiscal budget of the government. Diesel and gasoline alone account for 75% of this amount. However, based on the actual tax collection achieved (measured using bank records), the Government of Georgia has been able to capture less than 20% of the potential. The development of the model demonstrates an urgent need to collect reliable information on the import, transit and consumption of various petroleum products.

The model also indicates the possible reason for the recent proliferation of micro "tea-kettle" refineries. They are not economical if they have to operate within the ambit of Georgian tax laws. However, through the systematic non-payment of taxes, huge profits are able to be gained on very minimal amounts of investment. In this regard, regulation of refineries, including stringent licensing requirements, are of vital importance.[4]

Having seen the huge potential in revenue collection from the petroleum sector, and also having realized the problems its members are facing in managing their operations, the American Chamber of Commerce has undertaken an initiative to study the tax collection problem and provide recommendations to the Government of Georgia. A Petroleum Advisory Group consisting of members within the industry, taxing authorities and downstream expertise (representing donor, government and investor view points) was established. Thus, this model building exercise succeeded in precipitating some action to encourage and assist the government to take those steps necessary to bring about the reform required to improve tax collection and bring under effective regulation, the petroleum sector.

Given the immensity of revenue available from this sector, and that fact that consumers are already paying much of this tax burden in the retail prices for petroleum products, focusing efforts to improve tax collection in this sector can arguably be considered one of the most expedient ways to address the serious fiscal problems facing this government. Of course, opposition will also be considerable given the amount of illicit monies being made through this sector. Success will likely not depend on the government's actions alone but will also require the continuous support and involvement of others, including the donor community and foreign investors active in Georgia and the populace. It is evident that the populace is not fully aware of the magnitude of this problem. Given that they are paying this tax burden and not seeing its benefits, an educated populace could play an important role in addressing this problem.

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[4] A draft amendment to the Oil and Gas Law has been prepared and approved by the President for submission to the Parliament. This amendment, if adopted in to law, would provide the legal framework necessary to resolve this present legal shortcoming. For more information on the amendment, see the PA report entitled *Report on the Current Status of Legislation on Refining, LPG and Internal Pipelines* (August 25, 2002).

This appendix includes the output of the base case value added model and shows the detailed model results, by subsector, for the petroleum industry in Georgia.

APPENDIX B: DETAILED MODEL ASSUMPTIONS

In the preparation of the model, a number of assumptions were employed. The following tables provide the data used to develop the model.

General Economic and Tax Assumptions

The GEL/dollar exchange rate is assumed to equal 2.20.

The income tax rate is equal to 25% and VAT is 20%.

Taxes specific to petroleum products are shown in the table below.

Product	Excise (GEL/ton)	Customs (%)	Ecological Tax (GEL/ton)
Gasoline	200	0	0
Diesel	100	0	0
LPG	60%	12.5 (1)	10
Kerosene	0	0	0
Jet Fuel	0	0	0
Mazut	0	0	0

Note: (1) Customs duty is 12.5% when imported from outside the FSU.

Crude Oil Price Assumptions

Type	Unit	$
Average Ural crude	$/bbl	22.98
Based on Mediterranean	$/MT	167.05
Discount from Mediterranean	$/bbl	4.00
Discount from Mediterranean	$/MT	29.08
Average crude netback	$/MT	137.97
Average crude cost	$/MT	25.00

The Saknavtobi share in the domestic oil production is assumed to be 40%.

Natural Gas Price Assumptions

Type	Unit	$
Wholesale	$/MCM	50.00
Retail (excl. transportation and taxes)	$/MCM	82.00
Average gas price	$/MCM	66.00
Discount from Mediterranean	$/MT	29.08
Average Crude Netback	$/MT	137.97
Average Crude Cost	$/MT	25.00

Refinery Profitability Estimation

Product	Mediterranean ($/bbl)	Georgia ($/bbl)	Shartichala Refinery Yields (%)	Shartichala Refinery Product Yield Value ($ per bbl of refined crude)	"Tea-Kettle" Refineries Yield (%)	"Tea-Kettle" Refineries Product Yield Value ($ per bbl of refined crude)
Crude Oil	22.98	18.98		0		0
Gasoline	29.70	27.35		0		0
Naptha	22.47	20.12	25%	5.62	20%	4.02
Diesel	27.50	24.83	30%	8.25	30%	7.45
Kerosene	27.52	24.85	10%	2.75	10%	2.49
Jet fuel	27.52	24.85		0		0
Mazut (low sulfur)	18.73	15.70		0		0
Mazut (high sulfur)	15.24	12.21	30%	4.57	34%	4.15
Losses			5%		6%	
Gross Value				21.19		18.11
Refinery cost				1.50		1.00
Refinery profit				-1.85		-1.87
				$/MT		$/MT
Price to consumers				154.06		131.66
Refinery cost				10.91		7.27
Crude oil cost				137.98		137.98
Refinery profit				-13.47		-13.59

Saknavtobi interest in the Shartichala refinery is 40%.

Wholesale LPG and Retail Prices for All Petroleum Products

Product	Unit	Price
LPG (wholesale)	$/MT	375[5]
LPG (retail)	GEL/10 kg	13
	$/MT	591
Gasoline	GEL/liter	1
	$/MT	614
Diesel	GEL/liter	0.85
	$/MT	460
Product	Unit	Price
Kerosene	GEL/liter	0.6
	$/MT	325
Jet fuel	$/MT	280
Mazut	$/MT	121
Others	$/MT	214

Natural Gas Transportation and Distribution Assumptions

The pipeline tariff charged by GIC is 16.6 GEL per MCM. For transit gas, GIC receives 10% of the amount of gas transported. Gas losses during transportation on the high-pressure system are estimated at 4.5%. The border price for gas (provided by ITERA) is assumed to be $55 per MCM at the Georgian border.

Component	Unit	Cost
Gas transportation tariff charged by GIC for gas used in Georgia	GEL/MCM	16.60
Fee in kind for transit gas carried by GIC system to Armenia	% of transit gas	10%
Losses incurred on the GIC system	% of total gas carried on GIC system	4.5%
Price of gas delivered to the Georgian border	$/MCM	55.00
Residential gas price (based on Tbilgazi tariff)	GEL/MCM	270.00
Residential gas price (based on Tbilgazi tariff) in USD	$/MCM	122.73
Taxes on retail gas use including VAT and all other taxes	$/MCM	19.00
Total gas cost including transportation and all taxes	$/MCM	79.05

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[5] This price includes $10 for transportation, $15 for losses, $15 for storage, $15 for other costs and a 25% profit margin. It also assumes a $125 per MT cost for imports for LPG from Russia or Azerbaijan and includes all taxes.

Component	Unit	Cost
Net VAT	$/MCM	7.95
Net margin for sales to the residential class	$/MCM	35.73
Combined technical and commercial losses in gas distribution (based on Tbilgazi performance)	% of gas delivered to distribution	70%
Annual fixed costs for gas distribution	Tbilgazi	$3,000,000
	Other gas distribution	$2,500,000
Amount of gas distribution by enterprises in the public sector	% of total gas sales	80%
Amount of gas supplied to industrial enterprises by the public sector gas utilities	% of total industrial gas sales	20%
Amount of gas supplied to the power sector by the public sector gas utilities	% of total gas sales to the power sector	0%
Price for gas sales to the power sector	$/MCM	79.05
Price for gas sales to the industrial sector	$/MCM	86.96
Revenues from transit gas	$/MCM	6.25
Value of losses incurred for transit gas	$/MCM	2.81
Annual maintenance costs for GIC (see note)	GEL	3,800,000
Annual depreciation costs for GIC (see note)	GEL	3,800,000
Annual general and administrative (G&A) expenses for GIC (see note)	GEL	4,100,000
Annual salary and related payroll costs (included in the G&A amount shown above)	GEL	2,000,000
Value of annual gas losses incurred by GIC	GEL	12,384,000
Total annual operating cost for GIC	GEL	24,080,000
Total annual operating cost for GIC	$	10,947,000

Note: These figures are taken from the year 2000 financial statement for GIC.

Baku-Supsa Oil Pipeline

Component	Unit	Cost
Average cost to transport oil	$/MT	14
Share of cost attributable to Georgia	% of average cost to transport oil	50%
Georgian share of transit revenues	$/MT	1.15
Operating cost	% of the Georgian share of the average cost to transport oil	15%
Depreciation	% of the Georgian share of the average cost to transport oil	20%

Oil and Gas Valuation Model of Georgia 12/19/02

Oil and Gas Value Added Model - Base Case Results for 2002

	Product Sales (000 tons)	Price to Consumers $/MT	Product Cost $/MT	Total Rev. $MM	Customs Excise $/MT	Customs Excise $MM	VAT $/MT	VAT $MM	Expense $/MT	Total Expense $MM	Profit $MM	Income Tax $MM	Value Generated $MM	Public Sector $MM	Private Sector $MM	Total Govt Revenues $MM	Realized Revenues $MM
Upstream																	
Private Companies (Oil)	87.90	137.97		12.13	0.00	0.00	0.00	0.00	25.00	2.20	9.93	2.48	12.13	0.00	12.13	2.98	
Saknavtobi (Oil)	12.50	137.97		1.72	0.00	0.00	0.00	0.00	25.00	0.31	1.41	0.35	1.72	1.72	0.00	1.06	
Private Companies (Gas)	43.00	66.00		2.84	0.00	0.00	0.00	0.00	5.00	0.22	2.62	0.66	2.84	0.00	2.84	0.79	
Saknavtobi (Gas)	2.30	66.00		0.15	0.00	0.00	0.00	0.00	5.00	0.01	0.14	0.04	0.15	0.15	0.00	0.11	
Upstream Total				**16.84**						**2.74**	**14.11**	**3.53**	**16.84**	**1.88**	**14.97**	**8.46**	2.50
Downstream																	
Refining																	
Shartichala	100.00	154.06	137.98	15.41	36.36	3.64	25.68	2.57	10.91	1.09	0.52	0.13	**1.61**	**0.64**	**0.96**	6.49	
"Tea-kettle" Refineries	100.00	131.66	137.98	13.17	31.82	3.18	21.94	2.19	7.27	0.73	-1.36	0.00	**-0.63**	**0.00**	**-0.63**	5.38	
Total Refining	200.00			**28.57**		6.82		4.76	18.18	1.82	-0.84	0.13	**0.98**	**0.64**	**0.33**	**10.70**	0.00
Marketing																	
LPG-Wholesale	75.00	375.21	125.00	28.14	95.17	7.14	25.00	1.88	50.00	3.75	6.00	1.50	9.75	1.95	7.80	10.51	
LPG-Retail	75.00	590.91	375.21	44.32	0.00	0.00	75.04	5.63	100.00	7.50	4.92	1.23	12.42	0.00	12.42	4.98	
Gasoline	650.00	614.20	232.45	399.23	90.91	59.09	64.67	42.04	30.00	19.50	127.51	31.88	147.01	14.70	132.31	133.01	
Diesel	400.00	460.65	186.25	184.26	45.45	18.18	46.34	18.54	20.00	8.00	65.04	16.26	73.04	7.30	65.74	52.98	
Kero	117.00	325.17	186.40	38.04	0.00	0.00	37.28	4.36	20.00	2.34	9.53	2.38	11.87	0.00	11.87	6.75	
Jet	100.00	279.60	186.40	27.96	0.00	0.00	37.28	3.73	20.00	2.00	3.59	0.90	5.59	0.00	5.59	4.63	
Mazut	130.00	120.88	80.58	15.71	0.00	0.00	16.12	2.10	20.00	2.60	0.54	0.14	3.14	0.00	3.14	2.23	
Others	50.00	213.53	128.12	10.68	0.00	0.00	25.62	1.28	20.00	1.00	1.99	0.50	2.99	0.00	2.99	1.78	
Total Marketing	1522.00			**720.20**		84.41		79.54		46.69	219.14	54.78	**265.83**	**23.96**	**241.87**	**216.86**	40.00
Midstream Natural Gas (bcm)																	
Domestic transport	1	7.55	0.00	7.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.55	7.55	0.00	0.00	
Transit	1	6.25	0.00	6.25	0.00	0.00	0.00	0.00	0.00	10.95	2.85	0.71	6.25	6.25	0.00	2.85	
Total Gas Pipelines	2			13.80		0.00		0.00		10.95	2.85	0.71	13.80	13.80	0.00	2.85	
Early Oil Pipeline	7	7.00	0.00	49.00	0.00	0.00	0.00	0.00	1.05	7.35	33.60	0.00	**15.40**	0.00	**15.40**	8.05	
Total Midstream				**62.80**		0.00		0.00		18.30	36.45	0.71	29.20	13.80	15.40	**10.90**	7.00
Gas Downstream																	
Residential	0.25	122.73	55.00	30.68	4.00	1.00	20.45	5.11	85.91	5.50	-18.05	0.00	-12.55	-10.04	-2.51	-11.93	
Industry	0.24	86.96	55.00	20.87	4.00	0.96	13.83	3.32	0.00	0.00	1.58	0.40	1.58	0.32	1.26	4.67	
Power	0.51	79.05	55.00	40.24	4.00	2.04	12.51	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40	
Total Gas Downstream	1.00			**91.80**		4.00		14.80		5.50	-16.46	0.40	-10.96	-9.72	-1.24	**1.15**	-5.00
Rail Transportation	3.00	8.00	0.00	**24.00**	0.00	0.00	1.33	4.00	6.40	19.20	0.80	0.20	24.00	24.00	0.00	**4.20**	4.20
Total Oil and Gas Revenues				**836.00**		88.4		98.3		94.2	253.2	59.7	325.9	54.6	271.3	**247.51**	**48.70**

Significant conclusions

Public sector participation in oil and gas sector	**17%**
Government revenues from Oil and Gas sector	**247.51** million $

Most of the government sector revenues is from the tax collection from the downstream

Contribution from income tax is significant and it is **24%** of the total revenues from the oil and gas sector.

Exchange rate (GEL/$) 2.2